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ABSTRACT

This study attempted to describe and interpret informal staff development among 23 first grade and kindergarten teachers, and a counselor working together to create a new language arts curriculum. This report of the research includes data from 11 participants. The paper begins with a review of relevant literature covering research on staff development, change, collaboration, ecocultural theory, symbolic interaction, and instructional theory. The group perceived its main function as solving the shared problem of improving the language arts curriculum and based its actions on formal and informal discussions. The study focused on four areas: the language arts curriculum; interactional decision-making processes within the group; the group's environmental support; and professional growth of the teachers involved. Participant discussions of various language arts topics are analyzed in terms of five cognitive and three affective behaviors organized into a taxonomy of behaviors. A model of collaborative staff development, based on the data, is suggested. Among the recommendations suggested are: (1) when undergoing change, teachers should work in collaborative groups; (2) to aid formative evaluation, two types of documents should be developed to work together as a system--the first, based on the taxonomy, allows users to verify the existence of relevant behaviors in their groups, and the second provides a skeleton for a group journal; (3) research should be carried out on further information on the categories and behaviors in the taxonomy; and (4) the categories and clusters of behaviors in the taxonomy should be studied. (Contains 66 references.) (ND)

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Interactional Processes and Support Structures Which Foster Professional Development: A Qualitative Study

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Interactional Processes and Support Structures Which Foster Professional Development: A Qualitative Study

The purpose of the study was to describe and interpret specific ways in which the informal staff development of a group of teachers occurs. Two factors are important. Teachers mutually influence each other not only as individuals but also as a professional development group. By informal staff development, I mean the professional growth which occurs when teachers are working toward some shared goal other than their own growth. In the study, I describe and interpret the interactional processes and the support structures of a group as its members construct and refine a new curriculum.

The primary focus is the process by which teachers work together to create change within the context of renewal and restructuring. This process is a collaborative venture in which the school curricula and structure are assessed and altered, if deemed necessary, to meet students' present and future educational needs. I examined the functioning of two assessment and planning teams whose purpose is to determine needs and implement changes in their schools (see Shafer, 1994). I limit the discussion here, however, to only one group. I describe in detail how the members of the team jointly decide what changes they need to make in order to meet the new goals of their schools and how they jointly prepare themselves to implement those changes.

Terms

The terms professional growth, staff development, professional development, in-service training, and in-service education are often used interchangeably in the literature to refer to continuing education for teachers which is designed to "extend, add, or improve immediate job-oriented skills, competencies, or knowledge" (Orlich, 1989, p. 5). Within the study, I confine myself to using the terms professional growth, professional development, and staff development interchangeably, delimiting them to mean reaching beyond "the achievement of professional adequacy" to "the pursuit of professional excellence" (Duke & Stiggins, 1990, p. 117), wherein the teachers involved are using their projects, consciously or unconsciously, as avenues to becoming the best teachers they can be.

Because of my own particular interests and beliefs about how professional growth occurs, the concept of collaboration is also important in the study. I believe change in professional practice can result from collaboration on mutually defined needs. Growth implies change, and collaboration may be an avenue by which it is accomplished. Fullan and Stiegelbauer (1991) emphasize the social nature of the implementation of change, citing "constant communication and joint work" as major factors (p. 84). Collaboration can serve as the catalyst for change through the exchange of ideas (Fullan & Stiegelbauer, 1991). Using this literature base as a guide, I define collaboration as working jointly with colleagues toward the accomplishment of a shared professional goal.

I use the term assistance to refer to the informal teaching process which is apparently occurring in the group (Tharp & Gallimore, 1988). "Assisted performance" (p. 39) refers to what the learner can accomplish "with the support of the environment, of others, and of the self" (p. 30), and thus the concept seems to lend itself well to this investigation. Assistance allows the individual to stretch, or to perform at a level slightly beyond the level at which he or she would be able to perform alone.

Description of the Study

The purpose of the study was to investigate how the members of a group of first grade teachers work together to create a new language arts curriculum and why the group process facilitates change and assists the teachers' own professional development. Using the case study method (Feagin, Orum, & Sjoberg, 1991; Yin, 1989), I worked as a participant observer with the group over a six-month period to examine and interpret the processes by which members of the group contributed to their own joint professional growth.

The literature supports the investigation by pointing out the failure of traditional staff development to promote professional growth (Duke, 1993; Lieberman & McLaughlin, 1992), although teachers are interested in becoming better teachers and do so by other means (Sparks & Loucks-Horsley, 1990). I use ecocultural theory (Smith, 1991; Smith, 1992; Tharp & Gallimore, 1988), assisted by symbolic interaction (Ritzer, 1988; Turner, 1991), to explain how teachers considering a problem together constantly influence each other in their understanding of the problem and in how they deal with it as well as influencing and being influenced by factors external to the group. Instructional theory (Bruner, 1966) may also assist in explaining why the participants experienced development. The act of working together toward a shared professional goal may create changes in the individual members of the group which lead to their professional growth.

The group came to my attention through the principal of the building in which its members work. When the principal discovered I was interested in collaborative staff development, she indicated the members of this group seemed to be growing professionally as they worked within the alternative assessment plan with which several groups in her building were experimenting. The members of the group confirmed the principal's impression during the pilot study. As I conducted interviews with each of the five teachers, each indicated in some way her belief she had experienced growth as a result of working with the group.

The foregoing leads me to the research question which guided the study. **How do the ecology and culture of the school and the interactions within a group of first grade teachers engaged in a curriculum development project they have selected for themselves foster the professional growth of the members of the group?**

Significance of the Research

I believe the research may have significance for educational practice by providing clues for fostering and evaluating professional growth. I present the data in sufficient detail that the reader may select pertinent information to use in his or her own situation. In addition, because I have adopted an initial guiding theory, I engage in analytic generalization (Firestone, 1993), in that I use established theory to form predictions about professional growth and either confirm or disconfirm the predictions through the findings. I anticipate three possible uses for this research:

1. Existing groups will find information to support their present practices or to assist them in adjusting those practices in the hope of maximizing both the benefits to be gained from them and the functioning of the groups,
2. Schools will encourage the formation of collaborative groups to promote professional development, and
3. Schools will use information in the study to develop methods of evaluating the professional growth of teachers based on their collaborative efforts.

REVIEW OF THE LITERATURE

The bulk of the literature review for this work is interwoven with the presentation of the data. I base this arrangement on the following suggestion from Wolcott (1990):

> I expect my students to know the relevant literature, but I do not want them to lump (dump?) it all into a chapter that remains unconnected to the rest of the study. I want them to draw upon the literature selectively and appropriately as needed in the telling of their story. In our descriptive and analytic accounts, the most appropriate place for examining the literature seems to me to be in consort with the analysis of new data. (p. 17)

In this section, however, I begin the literature review by briefly addressing the research on staff development, change, and collaboration.

Review of Research on Staff Development

This body of research is relevant to the study as background information, demonstrating that school districts historically have been less than successful in their

staff development efforts (Guskey, 1986; Lieberman & McLaughlin, 1992; Loucks-Horsley & Stiegelbauer, 1991; McLaughlin, 1991; Smylie, 1988; Sparks & Loucks-Horsley, 1990). Oja (1991) cites work which claims "teachers' personal goals for their own development are important for staff development" (p. 56). Guskey (1986) suggests the lack of success of staff development may be attributed to failure to consider teacher motivation along with the process by which change occurs.

The literature suggests teachers want to grow professionally (Duke, 1993; Duke & Stiggins, 1990; Guskey, 1986; Iwanicki, 1990; Larson, 1991; Lieberman & McLaughlin, 1992; Sparks & Loucks-Horsley, 1990). McLaughlin (1991) suggests, however, teachers may not perceive staff development as synonymous with professional growth. "Standardization of practice" (Duke, 1993, p. 702) may be one reason teachers fail to view staff development as helping them become better teachers, since training based on this notion concerns itself with basic skills rather than enhancement. Teachers do develop, but not necessarily through formal programs (Sparks & Loucks-Horsley, 1990). Sparks and Loucks-Horsley (1990) list and analyze five models of staff development, only one of which--training--fits the traditional description. They call for further investigation of the other four models: individually guided staff development, observation and assessment, the development and improvement process, and inquiry. This research investigated the development and improvement process.

Review of Other Relevant Research

Change

The process by which change occurs is a primary concern of the study. By definition, growth can only occur through change, which becomes manifest in teachers as an increase in professional knowledge and behaviors.

Pressure for change can be internal or external (Ballantine, 1983; Fullan & Stiegelbauer, 1991). With proper support and assistance, either route can result in effective change (Hord, Rutherford, Huling-Austin, & Hall, 1987). Fullan (1994) suggests a coordination of efforts may produce more desirable results. Spillane (1994) appears to agree, as he describes the mutual influence of different parties in the process of instructional reform. From a symbolic interactionist perspective (Turner, 1991), the social context appears to be critical, with change being related to how a group defines its situations. Because people jointly construct reality, they can shore each other up in their resolve, either to implement change or to resist it (S. K. Worden, personal communication, October, 1992).

The Rand Change Agent Study (Hunt, 1989; McLaughlin, 1991) found several factors which enable change in teachers: ongoing assistance, structures that promote collegiality, concrete training and follow-through, and principal support and encouragement. Professional development is enabled through "managing multiple, diverse opportunities; creating and supporting norms and expectations for professional growth; developing and nurturing structures for communication, collegiality, and feedback" and "defining a central role for teachers" (McLaughlin, 1991, p. 79).

Other authors suggest similar notions. Loucks-Horsley and Stiegelbauer (1991) mention "supportive organizational arrangements" (p. 29) as an important factor in change. The importance of collegiality is suggested by Rogers (1983). Problem solving appears to be a factor as well in assisting change, particularly when it stems from locally identified needs (Fullan & Stiegelbauer, 1991).

Continuity may also be important for successful change, depending on the magnitude of the change (Goodstein & Burke, 1991). The implication is that people may have difficulty coping with an innovation if nothing remains the same.

Collaboration

Collaboration is beginning to emerge as an important component of teacher change (Goldenberg & Gallimore, 1991; Joyce & Showers, 1982; Lieberman & McLaughlin, 1992; Oja,

1991; Sparks, 1986). Goldenberg and Gallimore (1991) suggest for meaningful change to occur,

> staff development. . .must be grounded in the mundane but very real details of teachers' daily work lives and in a form that provides the intellectual stimulation of a graduate seminar. By intellectual stimulation, we mean engagement with the substantive knowledge to be taught and the sustained analysis of teaching as a professional pursuit. (pp. 69-70)

I believe the social context of a situation, including collaboration, influences the type and extent of change which may occur. Staff development, therefore, may be explained from the viewpoint of theory which addresses this social context.

Theoretical Perspective

The study addresses the learning behavior of teachers in the context of the school culture, with the primary goal being to describe and interpret both the process and the product of collaboration. Ecocultural theory (Tharp & Gallimore, 1988) provides the initial guiding perspective for the study, being especially suited to explaining the collaborative process. This theory considers the individual in context, addressing a variety of external factors which impinge upon behavior. The product of collaboration, which I view in this case as teachers' learning, may be a result of the collaborative process. Bruner's (1966) work on instructional theory, while apparently concerning itself with children, may also offer insight into adult professional growth.

Ecocultural Theory

The ecocultural perspective addresses the bidirectional relationships between the group and its environment. The ecology and culture assist or constrain development in context. Groups and their individual members develop as they engage in patterned and repetitive activities which are responsive to and supported by the ecocultural niche in which they exist (Tharp & Gallimore, 1988). It is important to understand the ecocultural niche because it affects the meanings people attach to the activities in which they engage, which in turn affect the strategies they employ and the ways in which they interact (Tharp & Gallimore, 1988).

Implications of the theory for staff development are that many factors influence professional growth. Besides the desires of the groups and individuals, contextual features such as personal situations and expectations of school personnel must be considered because of their impact on individual and collective behavior.

Symbolic Interaction

Symbolic interaction theory (Turner, 1991) rests on the premise that people create symbols in order to communicate with each other and that they interact on the basis of that communication, with meaning constantly being negotiated in the process. Meaning depends on individuals' interpretations of the situations in which they find themselves. Because people can interact with themselves and others, they can weigh alternatives and select courses of action.

Symbolic interaction explains behavior as a sounding out of the environment, with people and their surroundings being mutually responsive. Thus, development occurs within contexts. Reality lies not in wait of revelation but instead is constructed jointly by individuals as they seek meaning and attempt to make sense of the world (Hewitt, 1991). The theory suggests reality and meaning are dynamic rather than static and change thus is a normal part of life.

The implication of these ideas for staff development is that professional growth may require teachers to define their situations in ways that call for improvement. That is, teachers may need to modify their beliefs about what good teaching is or to see their own practices as problematic. Either may result from negotiations that occur in interaction with other professionals. Teachers may then select courses of action which will help them become better teachers.

Instructional Theory

According to Bruner (1966), instructional theory is a matter of knowing "how to arrange the environment to optimize learning according to various criteria" (p. 37). He theorizes humans have four intrinsic motives for learning: curiosity, the drive to achieve competence, the desire to emulate a model, and reciprocity. In the study, I assume all four operate together to promote learning.

Curiosity is a driving interest in that which is "unclear, unfinished, or uncertain" (Bruner, 1966, p. 114). It compels a person to pursue an interest to the point of satisfaction. Unswerving concentration on a particular idea, activity, or phenomenon may be productive; thus, active and sustained seeking of satisfaction is apparently one avenue to learning.

The drive to achieve competence seems to be intertwined with curiosity. Regardless of whether competence or curiosity comes first, the latter may disappear if not supported by the former. "We get interested in what we get good at. In general, it is difficult to sustain interest in an activity unless one achieves some degree of competence" (Bruner, 1966, p. 118).

The desire to emulate a model is also closely related to the drive to achieve competence. Bruner (1966) suggests regular interaction with someone whose respect the learner desires can create a situation in which motivation is high.

Reciprocity seems to be closely aligned with the concepts of symbolic interaction and ecocultural theory. Bruner's (1966) comments on reciprocity explain that it:

> involves a deep human need to respond to others and to operate jointly with them toward an objective. . . .Where joint action is needed, where reciprocity is required for the group to attain an objective, then there seem to be processes that carry the individual along into learning, sweep him into a competence that is required in the setting of the group. (p. 125)

In explaining how teachers learn from each other, this concept may be essential. It makes sense that one person acting alone cannot construct meaning. If so, the meaning would only pertain to the person who constructed it. The person could act on the basis of his or her own perceptions but interactions with others would be chaotic because no shared understanding would exist.

It seems logical to consider the relevance of this theory for adults as well as children. LaPlant (1986) describes adult learners as self-directed and as thriving in collaborative learning conditions. These two notions seem very similar to Bruner's (1966) ideas about the drive for competence, the desire to emulate a model, and reciprocity.

METHODS

The purpose of the project was to study informal staff development in a collaborative setting, with a group of teachers who had targeted an area for improvement and had developed a plan to implement that improvement. I selected a qualitative approach (Peshkin, 1993), since my goal was to describe and interpret:

1. the negotiation process as the group engaged in continual refinement of its definition of the situation,
2. the interplay between the group and its support structures, and
3. the "professional growth" of the members of the group.

In the school district involved in the study, various changes are emerging from the renewal and restructuring process. One of these changes is an attempt to improve the teacher evaluation system. Teachers are encouraged to work together to improve their practices. The incentive for doing so is being evaluated on the basis of those efforts rather than by the traditional observation method. The evaluation system was a major part of the context of the study. My objectives in the study were to:

1. observe and participate in group sessions for the purpose of becoming familiar with the work of the group, including the specific content,
2. conduct interviews with individuals for the purpose of verifying, disconfirming, and/or elaborating my impressions,
3. examine documents to expand my understanding of the group and its work,

4. analyze the content of group sessions, interviews, and documents for patterns of behavior, and
5. interpret patterns of behavior in light of the theoretical perspective.

I used the case study method (Orum, Feagin, & Sjoberg, 1991; Sjoberg, Williams, Vaughan, & Sjoberg, 1991; Yin, 1989) to investigate the processes by which the group wrestles with ideas and makes decisions as well as the settings and situations that support and constrain its functioning.

Trustworthiness

At least two sources in the qualitative research literature suggest that the issue of trustworthiness is of vital importance to a study (Lincoln & Guba, 1985; Merriam, 1988). Rather than striving for validity and reliability, a qualitative study seeks to establish trustworthiness of the work through its credibility, transferability, and confirmability.

Credibility

Credibility is suggested through prolonged engagement, persistent observation, triangulation, member checks, and peer debriefing (Lincoln & Guba, 1985; Merriam, 1988). Prolonged engagement was a strength of the study. I began in the spring of 1992 to consider the issues which were to result in the study. In the fall of the same year, the idea of studying the group was suggested to me by one of the persons who eventually became a participant in the research. I spent the next few months mulling over the idea. During that period, I became more aware of the work of the group which would eventually participate. I conducted the pilot study from early May through mid-June of 1993. Based on the results, I designed my research project and resumed data collection shortly after the start of the school year in August. I was actively engaged in the work of the group as a participant observer until January 31, 1994. I believe this prolonged and consistent contact lent itself well to the establishment of credibility of the research.

Persistent observation, while being somewhat entwined with prolonged engagement, was also evident as a separate entity. During the pilot study, I held individual interviews with the five core members of the group and their principal. Over the course of the study, including the pilot, I attended 11 of the group's 12 regular meetings, recording, transcribing, and analyzing all or portions of each. I attended and made field notes of other meetings, including some group sessions held briefly after faculty meetings, as well as other meetings related to the purpose and function of the group.

Triangulation was provided in the variety of data sources I used. I spent approximately 200 hours collecting data, specifically:

1. field notes of all sessions,
2. audiotapes and transcriptions of the group's regular sessions,
3. audiotapes and transcriptions of interviews,
4. personal journals which elaborate my field notes and reflections on events and ideas, and
5. documents either produced by the members of the group or related to the group's activities.

Member checks were also a strength, since I sought feedback from the participants periodically. Following my transcribing of each interview, I submitted the transcript to the interviewee and requested she edit it for accuracy as well as intent. That is, I asked each one not only to tell me if I had correctly preserved her words but also, if that were true, if she had meant to say what she did.

In addition to transcript reviews, I conducted two group member checks during regular meetings. During the first, I took my initial open coding chart (Strauss & Corbin, 1990) to the group, explained my system of analysis, and asked for feedback on my interpretation. The group agreed the chart presented a realistic picture of the flow of discussion. During the second member check, I returned with several open coding charts and charts for axial and selective coding (Strauss & Corbin, 1990). Again, the group agreed my analysis was a plausible interpretation of the ideas and functioning of the group.

A third member check consisted of submitting rough drafts of my analyses of different episodes to members of the group for their perusal and any comments they wished to make. The initial draft was a six-page documentation of the episode I call "Book It". Rather than taking this document directly to the group, I circulated it among the participants over the course of a week. I placed it in a large envelope, along with instructions and small, sealable envelopes in which the participants could place their comments. Each person checked his or her name off the envelope after having read the analysis. Using this method, I received no suggestions for change. I submitted drafts of eight episodes to the participants for review, with similar results.

Comments from two group members also lead me to believe that I have accurately represented the perspective of the participants. Teacher 5 expressed this idea in three ways. In responding to the Book It episode, she commented:

> Your study seems to be showing what our group has said all along. We work together very well! Showing our "downs" as well as our "ups" is a regular part of our group, and we gain strength from each other.

Teacher 8 wrote me a note after the last round of written material had been circulated, saying:

> I am still amazed at the accuracy of the written dialogue and the identification of the voices--albeit numbers! I would agree with your interpretation of implications and incomplete thoughts.

Transferability

Transferability may be judged by the reader through scrutiny of the data, with the reader inferring whether the information applies to his or her own case. Generalization to a population is beyond the intentions of this particular work, but generalization to theory, as described by Firestone (1993) and Strauss and Corbin (1994), is part of my interpretive process.

Confirmability

Confirmability was established through the audit trail. As part of the audit trail, I tested my coding plausibility and consistency by reviewing the coding of two complete session transcripts with an independent person familiar with coding techniques. Since this person generally agreed with my initial codes, the process produced only minor changes. I am confident my interpretation represents a logical explanation of the functioning of the group.

I made an additional contribution to the audit trail through peer debriefing. With other students working on qualitative dissertations, I participated from October until the end of the study in a biweekly seminar led by a faculty member with expertise in qualitative research. During these sessions, I discussed the current state of the study and received constructive feedback from my colleagues and the group's mentor.

Procedure

Data Collection Techniques

Participant observation was my chief tool (Spradley, 1980), with my goal being to understand the group from the perspectives of its members. In the study, I participated actively and overtly, functioning as a member of the group by asking questions when I did not understand and offering my ideas when I had them.

Informed Consent

Using an informed consent form as a foundation document, I explained the nature and purpose of my research to each prospective participant. I left a copy of the document with each one following my explanation, which sometimes included answering questions, and asked her to let me know if she was interested in participating in the study. Each one returned

the signed document to me within a few days, and my interviews began shortly thereafter. The content of several interviews led me to believe the principal was an important member of the team. I followed the same procedure in enlisting her participation, and I included an interview with her in the pilot study.

The content of the interviews and my observation of the June 8 meeting also gave me information on other prospective participants. Even though they were not part of the alternative assessment system, all first grade teachers had been attending the meetings during the year. Because of their participation in the group, I sought and obtained consent from the additional teachers, in the same manner described above.

Six participants, including the counselor and five kindergarten teachers, were added during the course of the study because of their interaction with the group. The study concluded with a total of 23 persons involved. This report of the research includes data from 11 participants.

Recordings of Regular Sessions

I recorded the group sessions on audiotape and transcribed the full tapes for the regular sessions, through December 13. I transcribed only what I believed to be relevant portions of the remaining tapes. I believe the audiotape recordings increased the accuracy of the description and analysis. Use of audiotape is a common practice because of the relative ease in reviewing the actual situation (Ritzer, 1988). Reactivity to the tape recorder may have affected the discussion, but this was not evident.

Journals

I kept a detailed personal account of the regular meetings of the group, entering my thoughts in a journal as soon as possible after each session. In addition to reflecting on the group meetings, I occasionally wrote to record thoughts about the study that occurred to me at other times.

Interviews

During the main portion of the study, I added one individual interview to those collected in the pilot study, choosing to interview the principal a second time. I made an audiotape of the interview and transcribed it fully, giving her a copy of the transcript for editing.

Documents

A variety of documents appeared over the course of the study, from meeting agendas and minutes to assessment instruments and copies of reports. I sorted the documents into the following categories:

1. those which provide insight into the background of the group,
2. those which reveal the nature or activities of the group, and
3. those which evaluate the group.

During the main data collection period, most of the documents I acquired relating to the group were copies of meeting agendas and minutes. I obtained agendas and minutes for all meetings from September 27 through January 31, including the minutes taken by the secretary for the kindergarten group at the January 3 meeting. I especially value these documents because I believe they very concisely present a picture of the group in its own words.

As part of the evaluation process, teachers involved in the alternative assessment were required to write individual narratives and to complete team effectiveness forms at the end of the 1992-1993 school year evaluating the work of their groups. I obtained copies of these two documents for each of the group's five original members. A building summary of the team effectiveness form was compiled by the principal, and I also received a copy of that item. My purpose in securing these documents was to see how members of the

group, and the building as a whole, perceived their functioning as contained in a self-report.

Data Analysis

Ethnomethodology, a view of how people go about making sense of their daily lives (Leiter, 1980; Ritzer, 1988), provided guidance for the data analysis. Concerned with behavior, it is a study of the methods people use to understand the social situations in which they find themselves. Conversation, one type of behavior, helps people maintain their conceptual environments, providing a way for them to "experience and act toward abstract objects such as institutions, groups, and values" (Hewitt, 1991, p. 221). People often talk about problems so they can solve them (Hewitt, 1991), as was the case in the present study. The group perceived its main function as solving the shared problem of the language arts curriculum, basing its actions on the talk which occurred at the meetings and subsequent unscheduled discussions among some individual members. Thus, my data analysis focused on searching for patterns and themes in the conversations which make up the group sessions and interviews.

Foci of Analysis

Although they changed somewhat over the course of the study, I had four foci of analysis: the language arts content, which was the explicitly stated goal of the group; the interactional decision-making processes within the group; the group's environmental support; and the professional growth of the teachers involved. I assumed the four foci would operate together in the construction of meaning (Erickson, 1986; Lincoln & Guba, 1985; Strauss & Corbin, 1990).

Language Arts Content. My initial focus was to understand what the teachers wanted to teach, why they chose to teach it in the order they selected, and the materials they chose to assist them. As the study progressed, however, I became less interested in the content itself and more interested in it as the vehicle for interaction. As a result, the data analysis is centered around discussion of the language arts program but concentrates on the processes in the group rather than the content.

Interactional Decision-Making Processes. My original goal was to look for ways in which members of the group negotiated with each other to select the language arts curriculum (Hewitt, 1991; Spradley, 1980). This goal, too, underwent change. The focus became looking for ways in which members of the group negotiated with others to increase their understandings of what it means to be a first grade teacher.

Environmental Support. Within the focus of environmental support, I originally sought the context in which successful interactional decision-making procedures thrive. This focus broadened, however, to include all interactional processes which contribute to the teachers' understandings of their professional roles.

Professional Growth. My fourth focus was to ground conceptions of staff development in the experiences of the group, demonstrated in change of the members over time as they worked to improve themselves and what they offer to their students (Strauss & Corbin, 1990; Strauss & Corbin, 1994). Originally I anticipated using several measures of this growth, but I was satisfied using only one. The information imbedded in interviews and group sessions supplied what I consider an adequate demonstration of professional growth.

Analytic Procedures

The analysis followed qualitative procedures (Lincoln & Guba, 1985; Merriam, 1988; Spradley, 1980). Analysis and interpretation was an ongoing process, stemming from the pilot study and continuing during much of the data collection period as well as after its conclusion.

Coding. I devised a multiple-level system for coding the raw data to discover themes and patterns (Spradley, 1980; Strauss & Corbin, 1990). The system is based on analysis of transcripts. I used color codes to initiate the analysis in the pilot study, highlighting material in the interview transcripts which seemed related in some way. Five different colors helped me quickly identify five recurring types of behavior. From these rough initial codes, I constructed a very basic taxonomy of behaviors (Spradley, 1980) which provided the springboard for further investigation and analysis.

My next step was to consider the patterns created in the flow of discussion. My goal for this analysis was to describe who was doing the talking. It was my perception nearly everyone participated freely, and I wanted to find support for that perception in the data. After experimenting with various circle-and-line charts, I decided to enter only the number code of the person initiating a segment of the discussion and draw arrows to and from the number codes of all persons taking part in that segment. I made only a crude attempt at depicting the chronology of the discussion, showing how one segment followed another. In the more complex segments, chronology is also shown when a person other than the initiator redirected the conversation slightly, staying within the topic but shifting it enough that the flow pattern changed.

Even though the group assured me in a member check that the single chart I had created at that point was a plausible representation of the discussion, I continued to analyze sessions in this way until I was satisfied the emerging patterns were consistent. The chart series thus created includes analysis from eight of the 11 sessions, including the one from the pilot study. This chart series served as a form of open coding (Strauss & Corbin, 1990) and, together with the taxonomy from the pilot study, provided a basis for further analysis.

The third major analytical step was to examine the discussion flow charts and assign conceptual labels roughly corresponding to the conversation segments, which, in turn, helped me compare and sort the concepts into categories. This process of axial coding is described by Strauss & Corbin (1990). Again, I created a series of charts, one for each group session, listing the conceptual labels along with the approximate location of each in the transcript. Many concepts could be found in multiple locations, both within and across transcripts.

The next step in the process was to select various concepts and categories of the discussion which interested me and create a third set of charts, which I call a composite analysis. Again, I tried several formats before settling on one which seemed to serve my purpose. In this set of charts I combined some of the information from the preceding sets and added my interpretation of the basic kinds of group processes I thought were occurring.

For this chart series, I developed three process categories--Thinking Aloud Together, Sharing Knowledge or Experience, and Other. The first two were based on my interpretation of the data up to this point. When I asked myself, "What are they doing?", I settled on those two categories as the answer because most of the group's time seemed to be spent engaging in those two processes. I created the third category as a catch-all for any behaviors which might not fit.

During the January 24 meeting, I returned to the group with all three sets of charts for a second member check. After briefly reviewing the discussion flow charts and explaining the content charts, I spent most of my time on the composite analysis. My goal in this session was to help the group understand the process categories I had created and seek confirmation, repudiation, or refinement of my interpretation. The group did confirm the categories. Some of the members suggested other processes, which I have included in the taxonomic analysis described below.

Taxonomy. Following completion of the charts, I created a taxonomic analysis (Spradley, 1980) based on the coding system, drawing also from my previous work (unpublished) on assisted thinking. This analysis underwent five revisions before I arrived at one which seemed to satisfy the demands of the study. The taxonomy is displayed in Figure 1.

The taxonomy consists of 42 behaviors, arranged in five different levels. The first level contains two large groups which I call cognitive behaviors and affective behaviors.

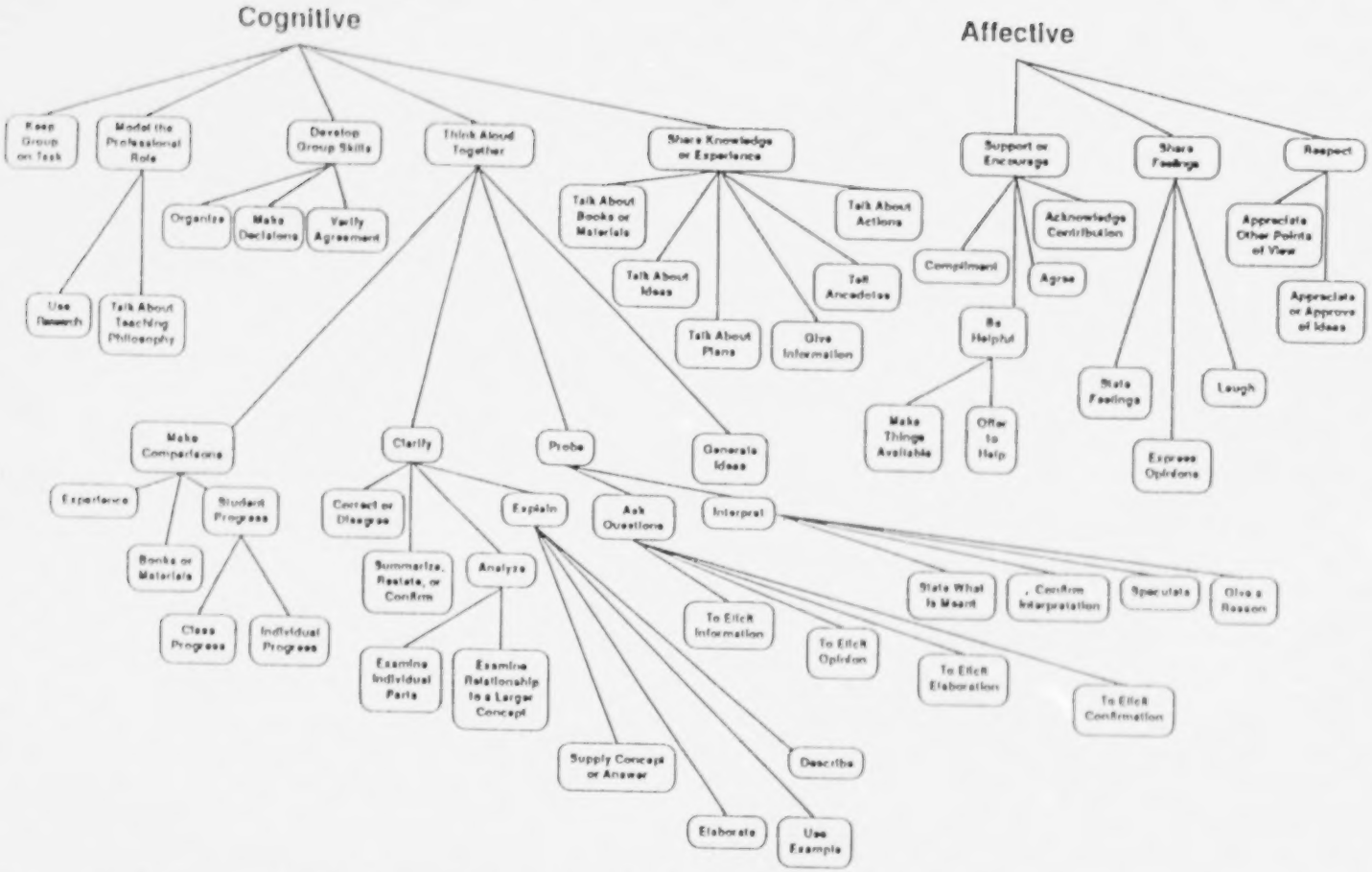

Figure 1. Taxonomy of Behaviors Which Assist Professional Growth

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I have identified five cognitive categories and three affective ones. Each of these, in turn, branched into multiple behaviors at the next level, with many continuing to branch two more times. The taxonomy is discussed in detail following the presentation of the data.

Using the taxonomy, I then returned to the transcripts and selectively coded (Strauss & Corbin, 1990), in an line-by-line analysis, the specific conversation segments in which I was interested. I then began writing analyses of specific behavior episodes. I submitted these analyses to the group for member checking, including editing, until I was satisfied my interpretations were reasonably representative and comprehensive.

PRESENTATION OF THE DATA

In this section I present the data, which I have organized around seven different content themes, suggested by topics of discussion in the group. The first four themes each occurred only one time over the course of the study while the others appeared as recurring topics. The original report of the research (Shafer, 1994) includes one theme which I do not include here.

I present the themes in segments, following each with an interpretation based on the taxonomy of behaviors introduced in the preceding section. I incorporate data from other sources, such as interviews and documents, when it seems related taxonomically to the themes.

In interpreting the data, I discuss each behavior in the taxonomy at its first appearance, highlighting it in the text in bold type. When the same behavior emerges in later material, I point out its presence but do not discuss it further except as it relates to a new behavior.

I have assigned code numbers to the participants in an effort to maintain their anonymity. In the data, these numbers appear at the left margin. When I was unable to identify a voice in the conversation, I left these remarks in the conversation, attributing them to a question mark (?) at the left margin instead of an identifying number.

Book It

At its September 27 meeting, the group is discussing the independent reading program for first-graders. The teachers all received packets of information from a program called Book It, in which the children read books or chapters of books at home or have books read to them. There is a reward at the end of a certain amount of time for the number of books read.

The episode begins with the leader bringing up the subject of the independent reading program. She suggests Book It as a way to begin and asks 5 to share her previous experience with this program. Teacher 5 responds with the way she handles book check-out, the logistics of getting the books back and forth between home and school, and the substance of her letter to parents about the program. She has come to the meeting with the letter, which leads me to believe she has thought ahead of time about sharing it.

1 - . . .the independent reading program. I guess Book It. Is that the way we would like to start it? 5, did you have something that you -

5 - Well, when I used Book It, I just prepared this to send with my kids. I haven't yet, but I'm going to allow them to check out two books each day. . . .And I'm going to get the teacher center to laminate the manila envelopes. They're going to have a manila envelope, each one, and they're going to be able to check out two books. One for the parents to read to them and one that they can try to read. . . .You know, later they'll be able to. And I just start out saying research has shown that children who are read to on a regular basis at home have a greater likelihood of becoming better readers than those children who are not read to at home. . . .And then I just put another paragraph in. "Don't be concerned if they want or bring home the same book over and over and over", so I explain that that's normal and that's good for them to hear books over and over. And then at the bottom I mention that I'll be sending home a

variety of little tips that help them. I thought every once in a while I'd send home an idea like before you turn the page, ask your child what will happen next. You know, sequencing.

1 - Um hm.

5 - There's all kinds of stuff they can do with oral reading.

1 - That's right.

5 - So I thought instead of just giving it to them all at once, I'd just send home something a little at a time. But if anybody wants to use this, they're welcome to use this letter.

My interpretation of this segment of the conversation is that one person, 5, appears to be sharing her knowledge and experience by telling her ideas about the Book It program and sharing some of her material with the rest of the group. Okun (1987) acknowledges this type of activity as a legitimate part of the group process in the field of counseling, labeling it "informing" (p. 77), which she says is sharing "objective and factual information" (p. 77). While 5 is talking, 1, 4, 7, 8, 9, and 10 are listening, but only 1 makes a response at this time.

Next, 1 responds with a compliment. Teacher 5 follows through on her offer by putting the letter in the book.

1 - Well, since this is such a neat idea -

5 - I punched holes in it, and I thought I could file it in here with our notes. So this will be available if anybody wants it.

Now 1 elaborates on her compliment, and 8 joins the conversation with a compliment. Then 5 goes back to her narrative about working with the program.

1 - I think this would be neat. And what I would like for you to do, 5, is when you do those neat little notes, tidbits, let's all do it. So it would be something that would help all of us,

8 - Um hm. You bet. That's great.

1 - because I might look and not find those. Or not have time to do those.

5 - I meant to bring the envelope that the kids make. You know your little "koala can do" book you have? There's a little picture of a koala looking out of a backpack and I just wrote on there Overnight Checkout.

1 - Um hm.

5 - I put [her own last name] and [the school's name] at the bottom. And they just slap those on those manila envelopes. It's got the kid's name. It's got my name. And it also says please return tomorrow.

In these three segments of the Book It episode, I believe I see six different behaviors described in the taxonomy--two affective and four cognitive. I address the affective behaviors briefly before a more extensive analysis of the cognitive ones.

The affective behaviors are primarily those of support. In their description of group processes, Corey and Corey (1982) suggest support is desirable when, among other things, people "attempt constructive changes and yet feel uncertain about these changes, and when they're struggling to rid themselves of old patterns that are limiting" (p. 20). Since the group was formed to address the need for change and was implementing change during the course of the study, it seems logical to assume support is vital. Indeed, during one of the member checks, a participant mentioned support as an important factor in the functioning of the group.

The preceding segment of the conversation yields two instances of **complimenting**, which I have included in the taxonomy as a way of **supporting or encouraging**, as both 1 and 8 praise 5's ideas. The other affective behavior noted is an instance of **making things available**, which is a way of **being helpful**, as 5 puts her letter in the notebook.

The cognitive behaviors exhibited in the group include two of the ways of **sharing knowledge or experience** and **modeling a role**. Teacher 5 shares her **ideas** as well as her **materials**, describes her **actions** in using Book It, and **talks about what research says** to teachers, which is modeling an appropriate behavior--that teachers should use research to support their practices.

The question of intentionality arises from the preceding observation. Did 5 intend to model a role by telling the group she included what research says in her parent letter? In responding to my query, she says she did not. "I just felt it was necessary to

reinforce the 'what' and 'why' of Book It for our parents. We need their support so badly. Research gives credibility to what we're trying to do for our kids." Whether 5 did or did not intend to model a role seems less important that the fact that she did it. Her comments provided an opportunity for others to learn that teachers use research findings to support or enhance their practices.

Only in a discussion of the idea that assistance in thinking must be intentional does this point become important. I discuss it here briefly, since the assumption that learning can take place apart from intent to teach is basic to the study.

The literature suggests people can learn from each other in casual ways. That is, the teacher does not necessarily intend to teach what the student is learning (Bruner, 1966; McCutcheon, 1988). Rogoff (1990), in pointing out children learn language, games, and appropriate behavior from interacting with more capable persons within their culture, emphasizes the importance of what she calls "guided participation" (p. 138). While use of this term may imply intention on the part of the adult, the bulk of Rogoff's (1990) comments support the notion that learning may not depend on intent. She suggests children learn how to function in society in the process of enjoying activities with adults. Likewise, Tharp and Gallimore (1988) argue "schools have much to learn by examining the pedagogy of everyday life" (p. 27). They suggest learning is a joint venture which may occur without the realization of such by the teacher or the learner. "Without awareness, a caregiver may engage in a collaborative enterprise with the most profound implications for the development of a participating child" (p. 28).

I include modeling behavior in the taxonomy because of its demonstrated potential for influencing the behavior of others (Bandura & McDonald, 1977). Thus, when 5 lets the rest of the group know she bases her practice on research findings, she is likely to influence others to do the same.

The rest of this portion of the conversation consists of 5 telling how she has worked with Book It. At the very end, the conversation starts to shift to the process of **thinking aloud together** as 8 asks 5 a question and 5 responds. Teacher 8's question about the die-cutter seems an effort to clarify by **probing for information**.

5 - I tried to get a management system that hopefully will work to where they can turn them in in the morning. . . and then maybe at the end of the day have a time that they check out to take home. . . .[I]n first grade, I've always written down what books they took because I feel like they should be responsible.
1 - Um hm.
5 - And they don't get to check out a book if -
8 - Do they have a little die-cutter of a koala over in the teacher center?
5 - No. Just bears.

In the episode, 5 **supplies the information** for which 8 has asked. At this point the group moves to discussing another phase of the independent reading program.

Clarifying behavior seems to be another part of normal group process (Corey & Corey, 1982; Hansen, Warner, & Smith, 1976; Okun, 1987). Counseling literature describes clarifying as an attempt to get at the heart of what is being said. I assume it is appropriate in both the cognitive and affective domains, but I include it only in the cognitive portion of the taxonomy since I did not notice it in the affective. Supplying a concept or answer is a logical complement to asking questions, and I include it in the taxonomy as a clarifying behavior.

The second Book It episode occurs later in the meeting, when 10 brings the group back to the topic by asking for more information. Teachers 1 and 4 respond this time by sharing what they know, and 10 appears to be thinking aloud with them.

10 - How do you set your goal for each month? For Book It?
1 - Book It. You do that according to how -
10 - You do it pagewise? Or books? Or -
1 - If it's a chapter book, you may go by chapters.
10 - Chapters. But what if all can't do chapters yet?
1 - Well, see I have a -
8 - . . .can do chapters.
1 - I would fix it so they could make - You know, the idea is get them to read.
4 - Even those little paper books that we make can be counted as one. You know, like Sam.

10 - Um hm.
4 - That can be counted.
10 - As chapters.
4 - At the beginning. And you begin to see what they can do.

Following 1's first response, 10 begins to narrow the focus for 1 by making her inquiry more specific. "You do it pagewise? Or books?" Teacher 1 then responds to the first part of the inquiry. "If it's a chapter book, you may go by chapters." Teacher 10 repeats the word chapters, as if to verify what 1 has said or to solidify it in her own mind. She evidently realizes that reply doesn't cover all the instances she might have so she follows with her "what if" question in an attempt to gain more information. Okun (1987) refers to this type of behavior as probing. Teacher 10 does not receive a direct answer, but she does receive examples. Teacher 1 starts to give her one when 8 chimes in, giving an example from her own class. Now, 1 takes a different tack by talking about what she might do herself, and then she reminds 10 what the goal is--to get the children to read. Teacher 4 comes in with an example, after which 10 seems to seek a verification that little books can be counted "as chapters". Teacher 4 closes this segment by giving her a confirmation but she puts a stipulation on it--until you "see what they can do".

This segment seems to consist of a mixture of sharing knowledge and thinking aloud together. Teachers 1 and 4 are sharing **information**, but 10 is also actively seeking to clarify things. She uses her own ideas to **interpret** what the others are saying when she asks if they mean pages or chapters. She seeks to **elicit elaboration** by following up on their responses and asking what to do if the children are unable to read chapters. This draws from 1 the beginning of an **example** of what she might do, but she stops and **restates** the goal of the program, leaving the impression nearly anything they want to check out is okay. Teacher 4 **confirms 1's interpretation** by telling 10 even the books they make will count until the teacher decides something else is more appropriate.

The next segment of the Book It theme shows 4 and 5 **elaborating** the Book It concept. They share their ideas about expanding on the program.

4 - I'm finding partners, too, in the room, and they can sit down on the floor and one can read a book to the other one and then the other one can read another book. And they come up to me at my desk, and I just keep a written account of that. And they begin to be really glad and happy about what they've read. . . .And they'll tell somebody else about that book.
1 - I think there was something in here about that, too. [in a book she has with her]
5 - We didn't have Book It last year, but the last time that I had Book It, one thing that the kids liked to do was on Friday. We called it Book It Day. And everybody brought one book. Well, at first, maybe only two or three kids would remember to bring it. So you give each one of them a place in the room and then make all the other kids go sit in front of them and listen to them read their book. The next Friday you'll have about eight kids that remember
1 - That's right. Um hm.
5 - their books that they've been practicing on at home.
1 - Um hm.
5 - And after a while you may have it be where. . .most of your class remembers to bring a book on Friday. And I made mine turn in their book to me at the beginning of the day or they didn't get to read it, because some kids'll just grab something during the day
4 - Um hm.
8 - That's a good idea.
5 - and say I'll read it. So they had to turn the book in to me. . . .when they first came in in the morning. And then those children who brought a book that they had worked on got to read. And it got where the groups got smaller and smaller and smaller. And then I would rotate them so that they could listen to two or three books.
1 - Neat idea.
5 - And they loved that. . .So many of them got a chance to read.

After a brief shift to tell 10 goodbye because she has to leave the meeting early, 5 returns to Book It, this time checking to see if the group has agreed to use the program. Two of the veteran teachers confirm this decision, giving a reason.

5 - So is everybody going to do Book It?

4 - I think so.
1 - I think that we'll call that our independent reading program to get it off the ground.
4 - Um hm. And then we can add to.
1 - And then we can add to.
4 - Sure.
1 - Or find something to take its place when we're finished.

I see three of the cognitive behaviors in this segment--**keeping the group on task**, **verifying agreement**, and interpreting by **stating a reason**. As 10 is leaving, 5 redirects the conversation to keep the group on task. Again, I do not know whether this was her intention. Maybe she was just continuing the conversation.

I believe keeping the group on task, whether a conscious or unconscious behavior, is very important to the context in which the group operates. Insight into the context may be gleaned from some of the documents I collected and from notes of other meetings I attended during the course of the study. For example, on September 8, an administrator in the district addressed the primary building teachers who are in the alternative evaluation plan. My field notes yield the following information:

> She [the administrator] opens with talking about the T.E.A.M. Concept (Together Everyone Achieves More). The alternative evaluation plan is designed to provide support groups for improving teaching. . . .Teaming provides structures for teachers to talk to each other.

In addition to the above, the annual report form for groups in the alternative evaluation system clearly focuses on how the group's work meshes with the work of the school district. The following questions from that form serve as illustration:

> How does the objective fit in with established building and/or district goals? What is the expected benefit for students? How will you include special program people and/or support staff?

Thus, the administration expects teachers in the alternative evaluation plan to work in small groups and to become better teachers because of it. The participants in the study know their group exists for a purpose which is important to the administration. Staying on task has the ultimate goal of achieving that purpose and can be accomplished not only through determination but also through external pressure to improve.

In addition to keeping the group on task, 5's question serves to start the verification process. Verification has been suggested as part of the counseling process (Okun, 1987), particularly in confirming understandings or establishing the need to adjust them. Teachers 4 and 1 verify agreement as they engage with 5 in practicing this group skill, and 1 states a reason for using Book It--it will get the independent reading program off the ground. Teacher 4 joins her in the justification, and, together, they imply that using Book It will help buy time for them to look at other programs or ideas they may want to use.

The next segment of the Book It conversation shifts to **organizing** and **decision making**. Teachers 1 and 8 are overlapping their sentences as they are explaining the need for the group to write its own letter.

8 - Are we going to compose our own letter on that? The one that's in the packet is - It has some stipulations in it that we -
1 - And we want to change it to fit our kids.
4 - Oh, did it? I haven't looked at that letter.
1 - I haven't even opened my packet yet.
8 - I think it says ten. It stipulates ten books instead of -
1 - But does it give us amount of time? Ten books a what?
8 - I don't remember. There were two or three things in it that we thought were too hard for our level.
1 - Okay.

Following this conversation, 1 shifts to a different topic--sustained silent reading. The teachers appear to have made the decision to send their own letter on Book It, but this time they have not verbally verified the agreement.

Shaw (1993) provides some basis for including organizing and decision making in the taxonomy of behaviors. She documents seven categories of skills in a study of how middle school teams of teachers use their common planning time. Two of her categories, Logistics

and Housekeeping, emphasize procedural and practical functioning and seem quite similar to the organizing and decision-making behavior described in this study.

One final Book It conversation segment occurs in the group only a moment after the above-noted one. In their discussion of sustained silent reading, the teachers have decided their children are not ready to engage in this kind of activity. They think aloud together by **generating ideas** about how and when to incorporate it into their teaching.

5 - Maybe when Book It is over. What about that? When Book It is over we could begin -
1 - this. And that could count towards our independent reading program.
5 - Um hm.
4 - It sure would.
9 - Okay.
1 - Well, . . .are we pretty much in agreement that might be a good idea? Because of their limited ability right now?
8 - You mean that the silent reading would contribute -
1 - Yes, later. . . .So we'll just wait on that till second semester.

Glover (1980) suggests generating ideas is part of creative thinking. He believes a high rate of idea production increases not only the chances of having a creative idea but also the options for solving problems. Csikszentmihalyi (1990), more specifically, indicates that progress is more likely "when new questions are asked or old problems are viewed from a new angle" (p. 193). Since the participants are dealing with innovative projects, idea generation seems important to their work. Besides generating ideas in this conversation segment, the group again has engaged in verifying agreement.

Comprehension

During the December 13 meeting, 4 and 1 have been discussing reading comprehension. Teacher 8 asks a question which leads the three of them through an episode of thinking aloud together and results in 8's having a clearer understanding as well as a practical approach to a problem. Teachers 4 and 1 also engage in some sharing of their own experiences.

8 - On the comprehension on the report cards,
4 - Um hm.
1 - Um hm.
8 - is that what they comprehend after they have read?
4 - Um hm.
1 - That's right.

Teacher 8 has asked for information by offering her interpretation of what comprehension means on the report cards. By saying "um hm", 4 and 1 **acknowledge 8's contribution to the conversation** and indicate they are following her while she is asking a question, a response which Okun (1987) suggests may encourage a speaker to continue. They seem to be acknowledging a switch of topics in the conversation. At the end of the question, 4 responds with another "um hm", this time confirming 8's interpretation of the term. Corey and Corey (1982), in a discussion of important skills in counseling, define interpretation as "offering possible explanations for certain behaviors or symptoms" (p. 18). Hansen, Warner, and Smith (1976) view interpretation as a way to "facilitate understanding" (p. 307).

In the discussion of comprehension, 1 confirms 8's interpretation by saying, "That's right." Teacher 8's follow-up question introduces a different idea, producing an elaboration on the first interpretation.

8 - Or. . .are you evaluating what they can understand?
1 - If they can't read, you have to -
8 - So, it's strictly comprehending what they've read?
1 - What they get from a story they've heard.
4 - Can they answer the questions?
1 - Um hm.
8 - Okay. So if I have a child that doesn't read well but follows directions well, he's understanding. He's comprehending me and understanding directions. But if he can't read well, he's probably not going to have good comprehension.

Teachers 8's question is a request for elaboration. As 1 begins to provide it, 8 **seeks confirmation** of her original idea. Teacher 1 instead supplies an alternative and 4 elaborates on this new idea. Teacher 1 confirms 4's elaboration, and the conversation segment ends with 8 attempting to solidify her new understanding by giving a hypothetical example. I include examples in the taxonomy as a way to explain because of the potential examples bear for helping clarify concepts (Klausmeier, 1961).

Teacher 8's assumption that not reading well might go with lack of comprehension serves to emphasize the complexity of the issue. It may also illustrate Sanders and McCutcheon's (1986) idea that teachers develop their own practical theories of teaching as they observe both teachers and students going about their normal daily activities. Teacher 8 seems to be forming a theory about the relationship between reading ability and comprehension. The next segment of the conversation focuses on the argument that comprehension refers only to reading.

4 - It's in the reading section. [on the report card]
8 - Right.
4 - I mean, that's where we have comprehension.

Teacher 4 appears to be pointing out that, since the question deals with understanding what comprehension means on the report card, the group should consider what the report card might be telling them. By **looking at the term in context**, she has begun to **analyze** what it might mean. In the next segment, 8 supplies another example in an apparent attempt to clarify the issue in her mind. Before anyone can respond, she follows with questions which restate the possibilities.

8 - If I read a story to. . .a group, and then I ask questions,
4 - Um hm.
8 - and I feel like this child has understood the story that I read to them, this is comprehension? Does that reflect on the grade on the report card? Or, it has to be what he's read. Right?
4 - Oh, I guess that's each one of us, probably [follows her own interpretation].
1 - Um hm. I would explain what I meant.
4 - I always explain it to the parent.
1 - Put a little star and say, "Not reading yet, but comprehends what is read to him."
8 - Um hm. Okay.
1 - That's what I do.

Teachers 4 and 1 have responded by describing similar courses of action from their own practices which cover both interpretations. This seems to provide 8 with a satisfactory approach to the problem. Her final response signals understanding.

Avoiding Religious Offense

In this episode, 7 brings up a problem she has faced in her classroom that day. Her class was studying a festival related to Christmas, and it seems to have occurred to her during the lesson that some groups might take offense to its apparently religious nature.

7 - You know, we're doing Christmas Around the World. How do you do that without - Because it all comes back to the Christian -
4 - Oh, yeah.
7 - How do you do that without stepping over the line?

In the intervening dialogue, at least two conversations branch off addressing this issue. The focus of one is speculation on the beliefs of a particular Christian group, while the other more directly considers 7's problem. The latter results in specific advice and an example.

1 - I leave it open for mine to go to the computers and do writing, because with headphones they don't have to participate. [A child] chose to help decorate the Christmas tree, but I did not force her to. That's her choice.

Now 5 expands the scope of the conversation, explaining why she thinks Christmas should not be ignored by the schools. Teacher 7 **relates her own experience** to what 5 is saying.

5 - I just read an article in Readers' Digest about taking religion out of schools. They are really taking it completely out of history books when it had such a major part in

our history. And that it's almost like clouding over something that's part of history or social studies. Or it's there, but you're pretending like it's not.

7 - We did St. Lucia today, and I thought no. . . .It is part of history.

5 - Um hm. Well, when you study other cultures, you study their customs, their beliefs, their dress.

7 - That's what we did. . . .I thought they might be offended, but that doesn't mean we're doing a religious thing.

5 - It's a custom.

These three brief conversation segments serve as an illustration of symbolic interaction theory at work in the group. As 5 shares what she has read, 7 evidently begins to think about what that means for her, defining her own situation in light of information she is receiving from others (see Ritzer, 1988). Teacher 7 moves from the uncertainty displayed in her initial remarks to a degree of confidence that she has not stepped over the line, a matter about which she seems to have been concerned.

I build upon the definition of interpretation described by Okun (1987) and by Corey and Corey (1982) in suggesting interpretation may also involve **speculating on the meaning** of a situation for oneself. Teachers 7 and 5 seem to be thinking aloud together as they look at 7's experience in light of how they normally study other cultures. As a result of comparing her experience with other experiences, 7 interprets her lesson as not religious, and 5 agrees. The remainder of the discussion centers around 11 as he offers an idea by sharing a related experience.

11 - One of the things I did was, instead of me saying the things, I was really just getting a list of Christmas time or December. And some of them were bringing up Jesus's birthday. And I was writing them on sentence strips and putting them up. And [another teacher] came into my room at the end of the day. And she said, "Are you allowed to put that stuff up?" I said, "Those aren't my words." I said, "I was writing down my kids' words and putting them up." And I said, "You know, if that's a problem, then I don't know what to do, because I'm not going to tell them, 'Oh, you can't say that in here.'"

1 - Um hm.

4 - Um hm.

Two people, 1 and 4, appear to be **approving of 11's idea**, a behavior I have designated in the taxonomy as a way of **respecting** another person. Teacher 1 has been saying "um hm" throughout. Then 11 elaborates on his story and seems to apologize for veering away from 7's problem. Teacher 8 adds an idea of her own.

11 - I mean, I just told them to tell me what you think of when you think of December and Christmas time. . . .That didn't cover everything you were talking about with Christmas Around the World and stuff like that, but, you know, when -

8 - And you could ask the children why. I mean, you're still not putting words into their mouths. Why does that come to your mind?

1 - Um hm.

11 - My kids even got into a discussion because one of them says, "It's God's birthday." And another one said, "No, it's Jesus's birthday."

4 - Gee.

11 - And another one said, "Well, God and Jesus are the same person." I mean, they were kind of having a discussion and I just stayed out of it.

4 - Uh huh.

1 - Uh huh.

Again, 4 and 1 are approving 11's idea. The group appears to be moving toward consensus on a laissez faire policy.

In a continuation of the conversation, 11 now offers an observation on his students' use of group processes, also indicating that he has a rather homogeneous group. Teacher 8 **agrees** with his observation.

11 - And it was kind of neat, though, how they discussed their different views and then kind of came together. Most of them, it seems in my room, anyway, seem to have about the same background.

8 - Um hm.

11 - I have a couple that wouldn't celebrate Halloween.

5 - Well, for Writing-Typing, I brought all my old Christmas cards. And I've got some secular and some religious, but I didn't exclude them. That's part of Christmas.

The discussion ends as 5 relates an experience of her own. Her remark that she does not exclude religious cards because religion is part of Christmas appears to summarize the group's opinion. In the counseling literature, summarizing is depicted as combining into a clear statement what the client has said, bringing out the main ideas (Okun, 1987). In this instance, 5 appears to be engaging in this type of process.

Multicultural Big Books

This episode is a combination of affective and cognitive behaviors. Teacher 9 has brought some very colorful and artistically attractive multicultural big books which she received in the mail that day. As she shows and describes them, the response from the group escalates until, together, the teachers create a litany of praise, with 9 offering bits of information and another group member responding with a compliment after each.

9 - I just want to show you I got this today. I ordered it. If you all want to join the big book multicultural -
10 - That's good.
9 - You have that? I have the one from Kenya.
10 - That is cute. I just love that.
1 - Oh, how neat.
10 - That's what I was telling you about.
9 - And it's got some facts. And there's a map.
1 - Oh, that's neat. Neat. Neat idea.
9 - And the other one is Coyote and the Butterflies. Native American.
5 - Gosh, those are great.
3 - They're gorgeous.
1 - They're great.

The group now begins to ask questions about the cost. The introductory book has a very low price, but the others are more expensive. The following conversation provides information about a major constraint of the econiche. Money may stand in the way of acquiring the resources the teachers would like to use.

3 - How much was it, 9?
9 - Well, the first one was three. One of these books was
3 - Three dollars?
9 - three dollars. Three dollars. Three ninety-five. And after that,
1 - And after that they go to 18.
9 - Well, yeah. It's either 14 or -
1 - Fourteen?
9 - So I don't know how long -
10 - That's not too bad.
9 - Yeah.
10 - I mean, a lot of them are 20.
9 - They have those crummy old things.
10 - Oh, yeah.
1 - And, I tell you, they come with a teacher's guide.
9 - Yeah.

In this segment, the group seems to be refining its ideas about what is a reasonable price for a big book. That is, the members of the group are communicating their own ideas about what is reasonable and, consequently, shaping the meaning of that concept through their interpretations. Ritzer (1988) describes this behavior as a normal part of social interaction.

> In the process of social interaction, people symbolically communicate meanings to the others involved. The others interpret those symbols and orient their responding action on the basis of their interpretation. In other words, in social interaction actors engage in a process of mutual influence. (p. 303)

Teacher 1's remark that "they go to 18" seems to say that the books are out of reasonable range. When 9 tells her it was probably 14, 1 repeats that amount, as if to confirm what 9

has said. Teacher 9's next comment seems to be indicating that she is uncertain how long she can afford to stay in the book club, but 10's opinion that it is not a bad price appears to sway 9 into agreement. She remembers some books are not as nice as these. Teacher 1 remarks they come with additional materials for the teacher, which provides added value.

As the group continues its examination of the books, 9 goes back to explaining their special features, and the litany begins again. The conversation closes with 9's offer to share the books.

9 - Little Noggin, the Sun, and the Moon Live in the Sky.
5 - Oh, that's marvelous.
9 - See, it's got the story drum. . . .There's a craft card. They can make an African story of their own. Resources. And there's language arts. And a writing extension.
1 - Neat. Neat.
9 - It's going to be in my room. . . .And I have a box. I guess I'll get a bigger box. I leave my easel right in front of the door with all my big books, so -
3 - I need to remember that for when I do Africa.

Teacher 3 seems comfortable with the anticipation of borrowing the book when she needs it. The interview with 1 yields the information that the members of the group share with each other more now than they did in the past. In the following excerpt from that interview, 1 speculates on the reason for the change.

1 - As we've gotten started with this [group project], other teachers I know have come to me, and now I feel more free to go to 4 or 7 with any problem I've got. . .I don't think we really understood that we all had the same common needs. I don't think we had the kinship of the needs that each of us had.
Ruth - So you couldn't imagine that they would understand your problem.
1 - Maybe. . . .It might just be me. Since I'm older and they're younger than I am, I think I might have assumed that they thought I already knew, and why should I ask them. . . .That's hard to explain. But I just know we didn't share before. And we do now. We share everything.

Teacher 1's observation, coupled with 3's remark about borrowing the book, provides the basis for including in the taxonomy the affective behavior of **being helpful**. Throughout the study, I noticed sharing of ideas, materials, books, plans, information, stories, and actions. Teacher 5, a veteran, may have been modeling the sharing behavior a few weeks earlier by giving an extensive report of how she uses the Book It system and making her parent letter available. Teacher 9, who is relatively new, may have learned from 5 that sharing is not only acceptable but expected. Teacher 3 supports that notion with her remark. She did not ask if she could borrow it. Instead, she said, "I need to remember that for when I do Africa", perhaps inferring permission from 9's sharing. The materials, ideas, and other commodities exchanged seem to provide a way for members of the group to do their jobs as teachers at a performance level beyond the one they would probably reach without the assistance of the group.

Moving With Your Class

Moving with your class is a discussion that occurs three different times over the course of the study. Three teachers are presently involved in the practice of moving with their classes, which means, in this case, at the end of first grade they keep the same students in the same classroom and teach them for second grade. At the time of the first conversation about it, one of the teachers, 5, is finishing her second grade year with the students. In the fall two others, 10 and 11, will move to second grade with their students and 5 will take another group of first-graders with the intention of keeping them for two years. Teacher 1 starts the ball rolling by saying she had considered doing that and explains why she decided against it. Teacher 5 tells them teaching second grade is easier than first, and together they speculate on why this might be so.

1 - I had considered the possibility of going to second grade with my kids, but I have decided not to. . . .I feel like if I'm going to be in this continuous progress thing and involved with that--and I am going to be, as deep as 6 will let me--it's better not to spread myself too far out of here. And, after all, they're going to be leaving

in another year. . . .[Second grade will be housed in a different building.] And I'd have to have Writing to Write.
? - More training.
1 - It's just more that I have to do.
5 - . . .so much easier.
1 - Oh, I know it will be. I know it will be.
8 - I do, too. I think it might be.
1 - Those children are easier to work with. . . .They're more independent.
5 - Well, everybody is on the same unit. Not everybody is in different places.
3 - Yeah, they are.

Most of this conversation segment consists of thinking aloud together. Teacher 1's original statement is a matter of **sharing her plans**. She engages in interpretive probing as she gives her reasons and speculates on how things will be. The person who indicates going to second grade would mean more training appears to understand 1's concern about learning the Writing to Write program. They all just completed the Writing to Read training in February and are still struggling as they implement it with their children.

Teacher 5's comment about second grade being easier to teach is an **opinion** arising from her own experience with it. The rest of the statements are probing and clarifying. The group seems to be engaged in analyzing what is involved in moving with your class as well as beginning to **describe** how teaching second grade is different from teaching first. Teachers 1 and 8 agree with 5 that teaching second grade is easier, and 1 and 5 offer elaborations based on their experiences teaching second grade. The conversation shifts to another topic following 3's agreement.

The second instance of discussing moving with your class occurs in September, after 5 is back in first grade and the other two are in second. Teacher 10 brings it up by asking 5 if she plans to move with her class again.
10 - 5, are you going to take your group back up again?
5 - That was the plan. Um hm. It's hard coming back down. [She laughs.]
10 - I'll bet it is. It was so neat.

Teachers 10 and 5 seem to be in agreement that moving from first grade to second with your class is a positive experience. Teacher 5 introduces a new idea by expressing her opinion about the difficulty of adjusting to first grade again, although her **laughter** appears to make light of it.

Teacher 1 enters the conversation by asking about the logistics of this practice after second grade moves to the other building. She seems to want to stay where she is. The group assures her the current cycle can be completed without moving.
1 - Will you then go over. . .to [the other building] with them? See, now, that's what I'm -
10 - Well, they're not doing it next year, though, I don't think.
[Two or three say "no" in response.]

This conversation provides a clue to the context in which the group operates. The members like working with their principal, and they like working with each other. Working in a different building would mean dealing with an unknown entity in the form of the principal and forming new relationships with the second grade teachers. Here they still have each other. The sharing and the "kinship" they feel might not be present in the new setting. This event may illustrate the importance of continuity within the process of change (Goodstein & Burke, 1991; Fullan & Stiegelbauer, 1991). Another possible reason for 1's reluctance to move is that her room is like a treasure cave of her personal materials. Moving would require a major effort.

With the assurance that they will not have to move next year, 1 turns to another concern about moving with a class. Teacher 10 stays with the logistics problem.
1 - I really don't think I want to go to second grade with a group.
10 - But how can they do that? I mean, how will they do that? Because I loved doing it.
1 - I would if I started out with them, but I don't -
10 - That'd be hard with a different - It'd be really hard.

At this point the conversation breaks into at least two parts. Everyone seems to be talking about different aspects of the same thing--moving with your class. When 5 begins

to tell about her own experience, the other conversations die away and everyone seems to be listening to the exchange between 5 and 10 by the time 10 finishes talking.

5 - They were starting a new adventure. Somehow they were ready.
10 - I have one little girl I had [in] kindergarten student teaching, last year, and this year. I've had her for three years. All of her school experience she's had me.
1 - Is that right?
8 - Did you have her for student teaching, you say?
10 - Um hm.
1 - And see, . . .I think that's good.
10 - You really get to know the kids. And they really get to know you. [She laughs.]
1 - They do.

The conversation now shifts to another topic, but 10 has introduced a new idea--the children and the teacher get to know each other very well. Okun (1987) describes seeing humor in situations as a way of relieving tension. Teacher 10's laughter might mean intimate knowledge of each other is sometimes more revealing than is comfortable. The group seems interested in 10's comment, but no one probes into what it might mean.

The third discussion of moving with your class occurs at the October 18 meeting. It is very brief and deals only with the difficulty of returning to first grade.

10 - 5, was it hard to step down? I mean, I'm sitting here listening and I'm thinking, oh, wow.
5 - Um hm. Yeah.
10 - I think -
1 - It's the hardest grade you teach.
10 - They're so capable. [She is talking about her second-graders.]
1 - . . .need good teachers with these kids that are not independent. But yes, it's the hardest.

This is mostly an affective conversation. Teacher 10 shares her feelings and asks 5 for her opinion, which 5 provides. As 10 starts to respond with her opinion, 1 joins the conversation with her ideas about the relative difficulty. They are both talking at once. Then 10 comments on her children's capability. Teacher 1 seems to be encouraging 10 to return to first grade next year and reiterates her statement that it is the hardest grade to teach.

A related episode occurs briefly as people are gathering for the November 8 meeting. Three people, 10, 8, and 1, are already in the room when I arrive. As I am turning on the tape recorder, 10 pulls out what she has been reading on non-graded classrooms and proceeds to read aloud to the rest of us. She and 1 are considering working in this type of setting with students who are just starting their school careers. I lose a few words at the beginning.

10 - ". . .the belief that individuals are unique and need different treatments to reach their maximum growth." Isn't that awesome?
1 - Uh huh. . .We need to build on that.
8 - [Teachers 8 and 1 have started talking at the same time in response to 10, and I lose all but the last three words of what 8 is saying.] . . .first grade need.
10 - But I loved - It talked about the operational definition of it.
1 - Um hm. Um hm.
10 - I just loved -
1 - See, those kinds of things, when you have [Teachers 10 and 1 are both talking at the same time, and 10's voice emerges in the following.]
10 - . . .first one that says, "Individual differences in the pupil population are accepted and respected, and there is ample variability in instructional approaches to respond to their needs."
1 - Um hm. Is that the little book? The little skinny one?
8 - I think that's the big one.
10 - This whole page needs to be copied off or written down somewhere. . . .It tells what it is.

I include this episode because of its affective nature. Teacher 10 seems excited about finding an apparently authoritative source to support what she believes. My field notes reveal that she began by telling us she has found the philosophy on non-gradedness.

In sharing this material, 10 is modeling a role by bringing **teaching philosophy** into the discussion. Again, the intent was not present. She shares two pieces of information from the book and **expresses her feelings** three different times, calling the first piece of information awesome and then saying twice that she loved it. Teacher 1 encourages her throughout the conversation. Teacher 8's responses indicate that she is listening, even though she offers only two brief comments. The first seems to be a response to the material, while the second helps identify the source.

Teaching Handwriting

During the June session, the group holds an extensive discussion about teaching handwriting, including the problems involved with holding pencils. Teacher 8, who is completing her first year of teaching, steers the conversation in this direction with a question.

8 - Now, did you do any handwriting?
1 - At the beginning of the year?
8 - Uh huh. At the beginning of the year.
1 - That would be something that I would just take. . .at least ten minutes on one letter. And these'll be the ones I'll practice first. Of course, we'll be doing just the plain manuscript this year. [She means next year.] Not D'Nealian.

After checking to see if she understands what 8 means, 1 provides her with more than a simple answer. She gives a few details about how she does it, and then reminds 8 that they will be changing the way they write in the coming year. Teachers 8, 1, 4, and 5 exchange several remarks about changing writing styles before 8 brings the conversation back to methods again.

8 - Now, I don't push the slant. I think I told them at the first of the year that one of the differences was the slant. But I never did push it all year long. Because I don't think that's that important in first grade. But the little tails, and where you start and end
5 - Where you start and end makes a big difference.
8 - makes an important difference.

Teacher 8 has begun to **analyze** the D'Nealian system by **looking at one part** of it. Teacher 5 picks up the analysis in mid-sentence, agreeing with 8. Now the conversation shifts as 5 starts reporting the third grade teachers' perception of students' handwriting problems.

5 - That's what the third grade teachers said. They said it's not the neatness that they didn't like. It was that the kids were going around, around, around, around.
8 - Yeah.

By sharing the third grade teachers' comments, 5 is making the group aware of **another point of view**. I include this behavior in the taxonomy because of a comment from 6 in the January 6 interview, as related below.

Ruth - Are there some other ways that I'm missing that you think they [the teachers] might be growing professionally in the groups?
6 - I hope that through some of this process, we learn to appreciate each other's differing points of view more. I think that really is important, and I think that by working through some of those things, we can come to a better understanding. I don't mean you have to agree with people. You don't even have to like them. But I think we've got to reach the point where we can respect each other's diverse opinions and build a relationship that enables us to work together in spite of whatever differences we have.

In the preceding discussion of handwriting, 8's simple response appears to be an agreement that the students are going around and around. Teachers 4 and 9 pick up the analysis now, while 5 continues to report the third grade teachers' comments.

4 - And like the b and d's are really easier, see. And then it goes right on into cursive. It really goes on into cursive.
5 - But they say because they aren't making them correctly it does not help with that transition into cursive. And the third grade teachers said if the reason to go D'Nealian was because of cursive, it doesn't matter anyway because they're not making

them right so it doesn't help that much.
4 - They aren't making them right?
9 - Well, it helps if they do the right formation, but not if they're not.

Teacher 4's questioning of 5's report that the children are not making their letters correctly initially appears to be a request for confirmation. It may also, however, contain a questioning of her own teaching. If third grade children are not making their letters correctly, she may need to adjust the way she teaches them to do that when they are in first grade. If so, symbolic interaction theory would suggest that she is beginning to "alter and modify meanings" (Ritzer, 1988, p. 303). As the analysis continues in the next segment, the conversation gradually moves to a discussion of a small device, called the pencil grip, which helps the child hold the pencil correctly.

1 - Do you know, with those little triangular things, that my children are all holding their pencils right?
5 - Oh, so you did use them.
8 - We all used them, but mine
1 - They chewed them up.
8 - ate them.
1 - They chewed them up.
5 - Did you order them for next year or did you decide not to?
1 - No, because we're not asking for things. . . .We may want to put in some things like that.
5 - I would really like to try it a year.

In this segment, a piece is added to the analytical puzzle--the holding of the pencil. Both 8 and 1 make the light-hearted observation that the children chewed on their pencil grips, and 5 expresses interest in giving the devices a try. In the next segment, 9 re-enters the conversation with the information that a choice exists, and the next exchange involves description and comparison of the two types of pencil grips. I include only a few comments from a longer conversation.

9 - They've got a new one out, I notice.
8 - That kind of roundy-looking one? I saw it, too.
1 - With those little button things? With the indentations where you put your fingers? . . .And it seems to me like I had a kid try it and it didn't do any good. But with the triangular thing, no matter how they'd pick them up -
8 - That's true.
1 - But they really had to turn this other one and get their fingers in these little - You know, there was some messing with it that you had to do.

The second handwriting discussion occurs at the November 29 meeting. Teacher 3 initiates the conversation by asking if everyone will be ready to start teaching it after the first of the year. After a brief discussion of where their classes are in learning sounds, which appears to be a prerequisite, 2 brings up a problem, and 1 offers a reason. The rest of the conversation is an exploration of the problem.

2 - Mine are not ready. I have maybe five or six that are really ready for handwriting.
1 - I ordered a bunch of those pencil guards. . . .I haven't passed them out to them yet. But it's hard to teach the sound of it, the name of it, and the way you make it all at the same time.
9 - Uh huh. That's why I was just concentrating on the sound right now. And the phonics books. I thought after January -
1 - And what you run into,
8 - They're writing so much.
1 - they're spent half the year making them the wrong way.
8 - That's right.

Both 1 and 9 give a brief explanation of what their classes are learning. They seem to be comparing progress. Teacher 9 agrees with 1 about the nature of the problem. Together, 8 and 1 embark on an analysis of the problem by jointly pointing out the problem is complicated by the fact that children still have to write, even though they have not had instruction in how to make the letters properly.

Following a short discussion of another topic, 1 returns to the subject of handwriting. The group begins to analyze scribbling, discussing the **performance of individual students** as they do so.

1 - [A student], instead of scribbling, now is making letters and he's calling it a story. And reading.
8 - I have a boy that is scribbling.
1 - And we were thrilled to see that.
9 - Is there a pre-1? [writing stage]
3 - Pre-1?
2 - Uh huh. Pre-writing. That's just scribble-scrabble.
9 - I have that. I have that.
8 - Pretend writing.
9 - I have one in that.
2 - That's what most children do when they're three, four.

In this conversation segment, both 8 and 9 compare a student in their own classrooms with what other members of the group are saying. Such comparisons may assist the teachers in developing their standards for student work as the teachers negotiate what it means, in this case, to be able to write.

Teacher 1's **anecdote** about her student who has progressed from scribbling to making letters stirs a response from 8 about one of her own students. Teacher 1 shares her feelings about her student's progress. Teacher 9 then asks for clarification with her question, "Is there a pre-1?" The term seems to be new to 3, who echoes it. Teacher 2 confirms and explains, and 9 indicates that she has a student in that stage. Teacher 8 seems to be clarifying, at least for herself if not for others. Teacher 2 closes the conversation segment with the information that this stage is typical of younger children.

Portfolios

The subject of portfolio assessment arises in mid-November and recurs at three- to four-week intervals through the rest of the study. I include here only one conversation segment to illustrate **disagreeing**, a behavior of the taxonomy not previously discussed.

Following a decision by the group to use portfolio assessment only for writing grades this year, I ask for further elaboration. As a result, a discussion of grades ensues.

Ruth - Does that mean you're not giving a grade in writing?
8 - Not at all. . .
1 - We do have a report card with S and E and - No, S+ and S and -
8 - Well, it really doesn't have that.
4 - No, it doesn't. It just has check marks.
1 - Well, check marks, but that's what it means.
8 - Excellent, good, fair, poor.
7 - So, to me, I feel like it's a grade.
1 - Um hm.

In this conversation segment, 8, 1, 4, and 7 seem to be negotiating the meaning of the check marks on the report card. Teacher 8 tells me that they do not give a grade in writing, but 1 points out that writing progress is reported. Both 8 and 4 disagree with 1 on the form of the report. Teacher 1 acknowledges they are correct but interprets the marks to mean what she has suggested. Teacher 8 gives her own interpretation, too. Teacher 7 joins the discussion by expressing her opinion that it is the same as a grade, and 1 agrees.

Summary

Within this section, I have presented data from the group and have supplied evidence to support the existence of eight categories of behaviors. Five of these types of behavior lie in the cognitive realm and three in the affective. Other behaviors may exist, but these are the ones I was able to document.

The cognitive categories consist of **Keep Group on Task**, **Model the Professional Role**, **Develop Group Skills**, **Think Aloud Together**, and **Share Knowledge or Experience**. I have identified behaviors which further define all of the categories except the first.

Keeping the group on task may be part of a larger set of behaviors which is evident only in the context. I include this category in the taxonomy because of a question which continues to nag me. Why would the group need to stay on task if it did not have some major agenda before it? The agenda documents I collected reveal the topics to be addressed during the meeting but I believe an encompassing agenda was also an influence. I perceive this encompassing agenda to have been set in layers. The groups themselves determined the framework for their own existence but the context of renewal and restructuring contributed the foundation upon which the framework was built. This context supported and encouraged the teachers in improving their practices through small, collaborative groups.

Evidence for including **modeling the professional role** as a category was exhibited several times during the study. I identified two behaviors which further define it--**using research** and **talking about teaching philosophy**.

The category called **developing group skills** appeared more frequently in the data. The list of behaviors which define this category includes **organizing**, **making decisions**, and **verifying agreement**.

Thinking aloud together is the category in which I took the greatest interest, and it is also the most fully developed. It contains four kinds of defining behaviors, three of which are clusters rather than single behaviors. The first cluster, **making comparisons**, may be applied to experiences, books or materials, or student progress. The latter may be applied to either groups or individuals.

The second cluster of thinking aloud behaviors is **clarifying**, which is subdivided into another four behaviors, two of which are subdivided even further. The first two ways of clarifying are **correcting or disagreeing** and **summarizing, restating, or confirming**. Correcting and disagreeing seemed enough alike that I chose not to distinguish between them. Likewise, summarizing, restating, and confirming all seemed to serve the same purpose, and thus I chose to group them together as one type of behavior. **Analyzing**, as a clarifying behavior, may take one of two forms in this work--either **examining individual parts** or **examining an entity's relationship to a larger concept**. **Explaining** took four different forms in the study--**supplying a concept or answer**, **elaborating**, **using an example**, and **describing**.

Probing, the third cluster of thinking aloud together behaviors, means either **asking questions** or **interpreting**. I have documented four types of questions and four ways of interpreting. Questions may be asked to elicit **information**, an **opinion**, **elaboration**, or **confirmation**. Ways of interpreting include **stating what is meant**, **confirming an interpretation**, **speculating**, and **giving a reason**.

The final thinking aloud together behavior is **generating ideas**. It appears as a separate behavior, but a closer examination of the data may reveal that it is a factor in other behaviors as well.

Sharing knowledge or experience may be applied to six different areas--**books or materials**, **ideas**, **plans**, **information**, **actions**, and **anecdotes**. The group appeared to engage in this type of behavior quite often in the study.

The affective categories include **Support or Encourage**, **Share Feelings**, and **Respect**. Each of these categories has a small cluster of defining behaviors. The affective categories are not as well defined as I had hoped they might be. In narrowing the focus of the study, however, I chose to concentrate more heavily on the cognitive behaviors. Supporting or encouraging took four different forms in the study--**complimenting**, **being helpful**, which may consist of making things available or offering to help, **agreeing**, and **acknowledging a contribution** to the conversation. Sharing feelings appeared in three ways--**stating feelings**, **expressing an opinion**, and **laughing**. The cluster of respecting behaviors included **appreciating or approving of ideas** and **appreciating other points of view**.

DISCUSSION AND RECOMMENDATIONS

I begin the discussion by explaining the theory of collaborative professional growth which I believe is grounded in the data. I base this theory on the taxonomy of behaviors described above. The guiding theoretical perspective provides additional support for the data, the foundation upon which the emerging theory rests.

First, however, I address one of the initial assumptions of the study. I selected my case because it was considered a successful group, not only by the principal but also by its own members. As the study progressed, it became increasingly evident the group functioned effectively, displaying many of the characteristics mentioned by Corey and Corey (1982) as typical of working groups, as opposed to ineffectual ones. The particular strengths of the group may lie in eight of these characteristics. The authors list seven additional characteristics which I did not observe. Group members use time outside the meetings to conduct business. Members trust each other and feel included in the group. Cohesion is important in the group because it encourages group members to try new ideas. Leadership is shared rather than being assumed entirely by one person. The members mutually determine the group's goals and readily work together to attain them. Group members accept responsibility for solving problems and feel hopeful they can implement change.

Assuming the existence of an effective working group, the emerging theory indicates professional growth can be assisted through collaboration in a variety of ways, many of which overlap or complement each other. As teachers interact with each other in the process of working toward jointly defined goals, they naturally engage in activities which contribute to their development. According to Rogoff (1990), collaboration enables the participants to "develop ways to communicate about difficult problems that advance the definition or solution of the problems" (p. 144). Furthermore, in a discussion of Piaget's view on the effect of the balance of power, Rogoff (1990) suggests "only when children are able to discuss problems as equals are they likely to take into account new ways of thinking" (p. 147). The latter comment underscores the importance of shared leadership. While Rogoff's ideas were formulated with children in mind, it may be that the same types of processes are at work in adults as well. The theory emerging from the data seems to suggest this possibility.

Bruner's (1966) notions on motivation offer one possible explanation regarding opportunities for professional development in a collaborative group. Curiosity, the drive to achieve competence, the desire to emulate a model, and social reciprocity may combine to provide the impetus which forms and operates the group. The members are actively pursuing satisfaction of their curiosity about the project in which they are engaged. Since they were allowed to select the group in which they work and the project toward which group energy is directed, meaningful models and the desire for reciprocity also seem quite likely to be present.

The drive for competence may be the basis upon which schools might lessen their reliance on formal staff development. If it is true that teachers want to be competent, as suggested by several authors (Duke & Stiggins, 1990; Guskey, 1986; Larson, 1991; Lieberman & McLaughlin, 1992; Sparks & Loucks-Horsley, 1990), then surely teachers will respond to this drive when given the opportunity to satisfy their curiosity in situations of working with models and others with whom they share common professional goals.

The Taxonomy of Behaviors

The eight categories of behaviors described earlier form the backbone of the emerging theory. In the preceding section, I have demonstrated multiple ways in which each of the eight categories of behaviors, except the first, may be experienced.

One statement that can be made with some certainty is that both cognitive and affective behaviors assist the group's thinking. Neither type of behavior is isolated in the data. The affective behaviors are attached to cognitive ones, and the cognitive ones seem to require affective support. Evidence from the group suggests that, even though the group deals mainly with cognitive issues, affective behaviors are often tightly interwoven

with cognitive ones. For the sake of convenience, however, I discuss each behavior as though it were a separate entity.

Cognitive Behaviors

The **Keep Group on Task** category was hard to discern. Business and casual conversation intermingle freely. The following journal note indicates one of my early realizations that the two kinds of talk are mixed:

> I think they're just chatting when, Boom! I realize they're working on their business. (November 29, 1993)

The participants may keep themselves on task without discernable signals because they want to accomplish their goals. This possibility piques my interest. I think goal accomplishment may serve two purposes. The first is personal and may be explained with Bruner's (1966) theory: The teachers stay on task because they want to achieve competence, satisfy their curiosity, and enjoy working together on their shared goal. The other is contextual and may be viewed from the ecocultural perspective (Smith, 1992; Tharp & Gallimore, 1988): The teachers stay on task because they have internalized the pressures placed on them by outside forces, in this case the expectations of the administration and the public which deal with renewal and restructuring of schools. I include the category in the taxonomy because of my belief that the group keeps itself on task, despite my lack of discernment of the ways in which it does so.

In observing the **Model the Professional Role** category, on no occasion did I think the person assisting the development of a professional personality intended to do so. The person modeling was acting in a professional way and, therefore, was providing insight for others into one aspect of what it means to be a teacher. The message being sent was that the professional teacher uses research and talks about teaching philosophy.

I define the behavior I call **Develop Group Skills** as an action whose purpose is to lead the group into unified thinking on a specific matter. In a description of how four middle school teaching teams spend their meeting time, Shaw (1993) provides justification for including these types of skills. Perusal of both her data and mine suggest three specific skills--organizing, making decisions, and verifying agreement. I treat these three skills separately although, logically, they may overlap somewhat in practice. Organizing means providing structure. Making decisions involves weighing alternatives and making selections based on criteria. Verifying agreement is a product of negotiation, wherein the group seeks to confirm its current understanding.

Think Aloud Together is a process of joint reflection and, as such, provides a major avenue for teachers to grow professionally (Sparks-Langer & Colton, 1991; McCutcheon, 1992). As groups engage in thinking aloud together, the participants move to new levels of thinking by stretching slightly beyond their present levels. The literature suggests this process of stretching assists them in their development (Bruner, 1966; Ginsberg & Opper, 1988; Rogoff, 1990; Tharp & Gallimore, 1988). The behaviors included in the Think Aloud Together category are make comparisons, clarify, probe, and generate ideas.

Making comparisons is an analytic process. I consider it separately from the analytic behavior which is part of the next process, clarifying. Comparing experiences, books or materials, and student progress is a regular activity of the group.

To clarify means to increase understanding, especially in cases where confusion might exist. The participants displayed four different ways in which they seek clarification. First, they sometimes correct or disagree with each other. While this behavior might also be considered a specific way of sharing information, I include it as a clarifying behavior because it can serve to alleviate confusion by providing disconfirming evidence. Second, the participants summarize, restate, or confirm what others say, which serves to lessen confusion. Third, the participants occasionally undertake analysis in an effort to increase their understanding. In doing so, they may examine the parts which make up an object or event, or they may examine its relationship to a larger concept. Fourth, they explain. They supply concepts or answers for each other, elaborate on what is being said, use examples, and describe. Explaining occupies much of the group's time.

To probe means to explore a topic in greater depth. By asking questions and making interpretations, the participants facilitate their reflections and increase their

understandings. These two behaviors, like explaining, also occupy a great amount of time in the groups. The participants use four types of questions to probe: those which elicit (a) information, (b) opinion, (c) elaboration, and (d) confirmation. They engage in four types of interpretive behavior: stating what is meant, confirming an interpretation, speculating, and giving reasons.

To generate ideas means to make suggestions or offer plans which address the topic which is being discussed. It implies the suggestions or plans have originated during the discussion but it is possible this is not always the case. The time of origination is of interest to me because I believe the collaborative process fosters creativity, with one idea growing from another. In the study, I observed the participants making suggestions and offering plans which seemed to spring from the discussion.

The **Share Knowledge or Experience** category provides an important way for teachers to learn from each other. It allows them to acquire information about how others work and to apply that information to their own situations. This behavior may be most like traditional staff development, as described by Sparks and Loucks-Horsley (1990), in which teachers are trained in specific deficits or in areas of emerging knowledge. One difference is in collaborative groups the information may be presented in smaller amounts and may be repeated or elaborated over time. This concept is basic to the notion of guided participation described by Rogoff (1990).

A second difference between formal training and sharing knowledge or experience is the informal sharing that occurs in a group is more personal and interactional than a training session. The participants may talk freely with the person providing the knowledge or experience, and they may probe for other pertinent data, embellish the presentation with their own complementary information, or work with others to relate the information to their own circumstances. Ausubel's (1977) discussion of "relevant subsuming concepts" (p. 148) suggests information is more meaningful to individuals when they can relate it in this way to information they already possess.

The behaviors for the Share Knowledge or Experience category focus on areas to which this sharing may be applied. These terms include looking at books or materials, talking about ideas, plans, or actions, giving information, and telling anecdotes.

Affective Behaviors

The **Support or Encourage** category involves fostering the development of desired qualities or behaviors through active listening. Corey (1977) describes the counseling term active attending as letting the speaker know that the listener is making sense of what the speaker is saying. I have incorporated the concept of active attending into the definition of this category, calling it active listening instead.

I include supporting or encouraging in the taxonomy for three reasons. First, I observed it in the group. Second, at least one of the participants mentioned it as a vital part of the functioning of the group. Third, the literature suggests it is appropriate (Corey & Corey, 1982; Joyce & Showers, 1982; McLaughlin, 1991).

Supporting and encouraging behaviors are complimenting, being helpful, agreeing, and acknowledging contributions. To compliment means to express esteem or admiration. In the study, I was interested in professional compliments rather than personal ones. Both occurred but I have documented only the former. To be helpful involves making things available or offering assistance. To agree means to uphold another person's ideas or suggestions as right or desirable. To acknowledge contributions is to let the person speaking know he or she is valued as a member of the group. It implies neither agreement nor disagreement; its purpose is inclusion.

The **Share Feelings** category contains ways the participants let each other know what their feelings are. Its behaviors are state feelings, express opinions, and laugh. The latter contains the only non-verbal behavior in the taxonomy--laugh, which is the behavior I understand the least. Laughter occurred at several of the meetings, and most of the time it seemed an expression of enjoyment. On the occasions on which I actually documented laughter, however, enjoyment was not the explanation which came to my mind. Based on Corey and Corey's (1982) comments on the tension-releasing value of laughter, I think it is related in these instances to some concern. The other two terms, state feelings and

express opinions, mean to explicitly reveal a feeling or opinion to the group, not necessarily labeling it as such.

The category called **Respect** is a result of an interview with the principal, who indicated learning to value the perspectives of others is an important way professional growth occurs in the group. Its behaviors include appreciate or approve of ideas and appreciate other points of view. Both may involve compliments, but on at least one occasion a simple "um hm" conveyed such a message. Bruner's (1966) work supports the inclusion of this category in the taxonomy by his observation that individuals may be motivated to learn by the desire for respect from a model.

Evidence of Professional Growth

I based this investigation on the assumption teachers experience professional growth when they work together in collaborative groups. Perhaps it is appropriate to consider briefly whether or not that assumption is true. I offer two types of evidence in behalf of such an assumption.

First is the judgment of the participants. The following transcript excerpt comes from the end of the meeting in which Book It was discussed:

1 - This is where I have learned. What I have learned from 5 this afternoon!

Teacher 3 also expressed her belief, during an interview, that she has learned a great deal from being part of the group.

3 - I think it's important for everybody to be involved. . .because I think it's helpful for everyone. . . .Maybe there would be some that would really not like it because you do have to put in more hours in than you would just on the regular [evaluation] cycle. But then I've learned ten thousand times over what I would from just doing a lesson for [the principal].

In a different interview, 5 adds supporting evidence.

5 - [The group] does a lot more good. You learn a whole lot more and a lot more gets accomplished as a result of doing that than just going to a workshop or a meeting. . . .[Y]ou learn how other teachers teach the same thing that you're teaching and what they may use. Of course, you saw today that we share material. . . .There's a lot of different ways they're doing it and the more ideas you get the better. You have a selection of ideas to choose from.

The second body of evidence is that which is inherent in the taxonomy. Four of the eight categories--Keep the Group on Task, Model the Professional Role, Think Aloud Together, and Share Knowledge or Experience--are firmly tied to established theories of learning and teaching while the rest occupy important supportive roles. Meloth and Deering (1994), in a study of cooperative learning groups, augment the evidence. They suggest that individuals learn from talking to each other in these groups, not only from such complex talk as explaining and elaborating but also from sharing information, which may become the focus of later reflection and use.

A Model of Collaborative Staff Development

The foregoing theory suggests one possible model for collaborative staff development. This model, illustrated in Figure 2, may foster professional growth in teachers who work together on solving shared problems. The basic format of the development/improvement process described by Sparks and Loucks-Horsley (1990) provides structure for this design in that the process involves (a) a problem to be solved, (b) acquisition of skills or knowledge necessary to solve the problem, and (c) the professional growth which occurs during the solving of the problem.

According to the model, professional growth has roots in the identification of a specific problem. The problem may stem from a diversity of areas, such as the school reform movement, finances, local values, or classroom practices. It may be identified by any individual or group, whether it is one involved in solving the problem or one within the ecocultural niche.

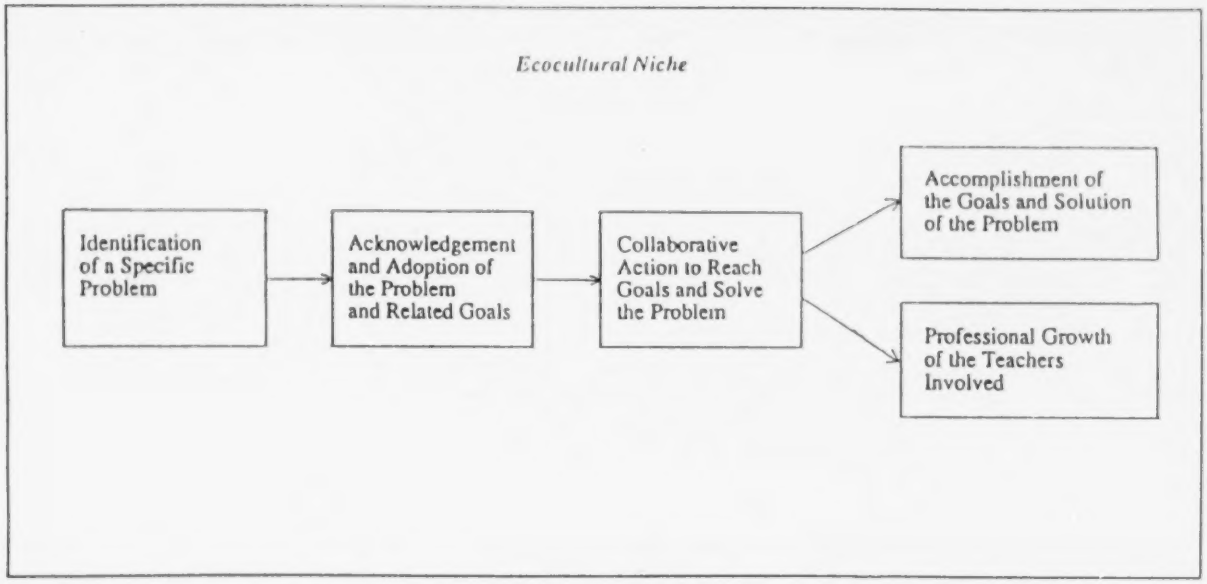
Ecocultural Niche
Identification of a Specific Problem
Acknowledgement and Adoption of the Problem and Related Goals
Collaborative Action to Reach Goals and Solve the Problem
Accomplishment of the Goals and Solution of the Problem
Professional Growth of the Teachers Involved

Figure 2. A Model of Collaborative Staff Development

While the source and identification of the problem are not crucial to professional growth, its acknowledgement and adoption are, as indicated in the model's second stage. The individuals who will be involved in its solution must recognize the situation as a problem, want to address it, help define it, and decide on goals which they believe will lead to a satisfying solution.

The third stage represents collaborative action. Up to this point, the model might serve equally well for individual investigation. I include this section as a necessary component, however, because of the indications in the study that professional interaction fosters the development of the teachers involved.

Collaborative action is directed toward the goals set by the group. If specific knowledge or skills are deemed necessary to reach the goals, they are sought and acquired as part of the collaborative process. For example, in addressing the problem of fragmentation of the first-grade language arts curriculum, the teachers established the goal of an independent reading program for the children. In implementing that goal, they wanted to know if an already structured program, Book It, would meet their criteria. Because they had experiences to share about the program, their search for knowledge and skills took place entirely within the group. The teachers acquired information from each other about the program and included it in their overall plan as a result. Acquisition of skills and knowledge, however, is not the sole focus of this section of the model. Equally important is the reflection which occurs as teachers communicate with each other about their own practices and their shared goals.

The fourth stage is depicted in two parts because collaborative action may produce two separate outcomes. One includes accomplishment of the goals and solution of the problem. The other consists of the professional growth of the teachers involved. The latter is not dependent on the former. That is, the process of collaboration itself is sufficient for development of the individuals involved.

The model is encased in the econiche from beginning to end. Besides its possible involvement in the identification of problems, it may influence (and be influenced by) the other stages as well. For example, the level of administrative support and encouragement may influence whether or not teachers acknowledge situations as problems or adopt them as their own. The study suggests that such support and encouragement is a vital factor as well in the interactional process which produces the outcomes.

Recommendations

In this section, I attempt to put myself in the place of the reader and suggest ways in which the findings might then apply to my own practice. My first recommendation is of a practical nature. If my school were in the midst of change, I would assist teachers in forming collaborative groups, using and building upon the supporting and encouraging behaviors listed in the taxonomy. Maeroff (1993) hints at the value of this idea in a discussion of using teams to effect change, stating that "professional development that builds on the work of teams can orient a school toward the continuous intellectual renewal of those who work in it" (p. 515).

Second, when teachers are part of collaborative groups, I would engage them in their own evaluations, emphasizing the formative aspects rather than the summative. Barber (1990) suggests when teachers are involved in formative self-evaluation the summative aspects play a far less important part in the teacher evaluation process.

Next, to aid formative evaluation, I might develop two types of documents which could work together as a system. The first, based on the taxonomy, would allow the users to verify the existence of relevant behaviors in the groups. The second would provide the skeleton for a group journal, an idea which occurred as the group was discussing the difficulty of writing in the individual journals required for the alternative evaluation system.

8 - What's going to be different in what you write in the journal and what we're doing in our meetings? Our meetings are kind of like a collective journal. We've got it written down [in the minutes].

1 - Um hm.

5 - We bring our ideas.

9 - And then next week when we meet we talk about them.

The group did, in fact, engage in joint reflection, especially in the preparation of the annual report, the focus of which was the goals and objectives of the group. The written responses were a brief synthesis of the heart of the discussion, but the discussion itself was an extensive probe. A document which periodically asked the group to discuss one or two items and record responses could serve as adequate evidence of progress toward goals as well as joint professional growth.

Another project involves continued observation of the same or similar groups. The main purpose would be to gather further information about the categories and behaviors in the taxonomy. I have a special interest in more carefully defining and describing the **Think Aloud Together** and **Share Knowledge or Experience** categories. In addition, I would like more evidence for the placement of behaviors in particular categories and clusters.

Other related research would involve subjecting the categories and clusters of behaviors to a quantitative analysis. During a member check, one of the participants expressed some curiosity about the number of questions that were asked in relation to the rest of the items. I was able to describe the kinds of questions that were asked but I did not fully satisfy her curiosity. The Meloth and Deering (1994) study indicates others may be interested in this kind of information as well.

Finally, I would study the members of successful collaborative groups. Because this project did not address the characteristics of the individuals who make up the groups, I do not know whether different individuals would work well in similar situations. Also, it would be interesting to study the roles played in the group, observing what the roles are and whether or not they shift.

In the continuing efforts to improve our profession, I hope we will have the patience to construct meaningful changes. The district involved in the study is taking careful steps in that direction. Teacher 4 expressed it clearly in an interview as she and I were discussing the alternative evaluation system:

> I think we've really. . .done a lot in that time and really made some changes. It's helping everybody and that's what it's all about. That's what the evaluation is supposed to be about.

Helping teachers do their jobs well seems like an appropriate goal.

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